IN THE CLAIMS:

Prior to examination on the merits, please amend the claims of the international application as follows.

1. (Original) A method for smoothing and polishing surfaces by treating them with energetic radiation (3), in particular laser radiation, in which the to-be-smoothed surface (1) is remelted in a first treatment step using said energetic radiation (3) and employing first treatment parameters at least once down to a first remelting depth (10), which is greater than a structural depth of the to-be-smoothed structures of said to-be-smoothed surface and is ≤ 100 μm, wherein
   in said first treatment step continuous energetic radiation or pulsed energetic radiation with a pulse duration of ≥ 100 μs is employed and said surface (1) is remelted down to a first remelting depth (10) of 5 to 100 μm.

2. (Original) A method according to claim 1, wherein in a second treatment step using said energetic radiation (3) and employing second treatment parameters, micro-roughness remaining on said surface (1) after said first treatment step is leveled by remelting down to a second remelting depth (14), which is less than said first remelting depth (10), and by evaporating roughness peaks (15).

3. (Currently Amended) A method according to claim 1 ~~or 2~~, wherein said first treatment parameters are selected in such a manner that no ablation of material occurs.

4. (Currently Amended) A method according to claim 2 ~~one of the claims 2 to 3~~, wherein pulsed laser radiation with a pulse duration of ≤ 1 μs is employed in said second treatment step.

5. (Currently Amended) A method according to claim 1 ~~one of the claims 1 to 4~~, wherein said surface (1) is remelted in said first treatment step down to a first remelting depth (10) of approximately 10 to 80 μm.

6. (Currently Amended) A method according to claim 2 ~~one of the claims 2 to 5~~, wherein said surface (1) is remelted in said second treatment step down to a second remelting depth (14) of maximally 5 μm.

7. (Currently Amended) A method according to claim 1 ~~one of the claims 1 to 5~~, wherein said surface (1) is remelted in said first treatment step multiple times in succession.

8. (Original) A method according to claim 7, wherein with each new remelting step, said first remelting depth is selected less deep than in the previous remelting step.

9. (Currently Amended) A method according to claim 7 ~~or 8~~, wherein said energetic radiation (3) is led in parallel paths (6) over said surface (1) with successive remelting steps of a section (4) of said surface (1) being carried out with paths (6) turned at an angle.

10. (Currently Amended) A method according to claim 1 ~~one of the claims 1 to 9~~, wherein treatment in said first treatment step occurs successively in a multiplicity of adjacent sections (4) of said surface (1), with the treatment parameters being changed continuously or in steps towards the border of said sections (4) in such a manner that said first remelting depth (10) decreases to said border of said sections (4).

11. (Currently Amended) A method according to claim 1 ~~one of the claims 1 to 10~~, wherein in order to retain edges (13) on said surface (1), said first treatment parameters of said first treatment step are changed continuously or in steps in such a manner that said first remelting depth (10) decreases toward said edges (13).

12. (Currently Amended) A method according to claim 1 ~~one of the claims 1 to 11~~, wherein said laser radiation (3) is led on one or a multiplicity of meandering paths (6) over said surface (1).

13. (Currently Amended) A method according to claim 2 ~~one of the claims 2 to 12~~, wherein said surface (1) is impinged with protective gas during said first and said second treatment step.

14. (Currently Amended) A method according to claim 1 ~~one of the claims 1 to 13~~, wherein treatment occurs with a beam cross section in form of a line or with a rectangular beam cross section of said energetic radiation (3).

15. (Currently Amended) A method according to claim 1 ~~one of the claims 1 to 14~~, wherein said to-be-smoothed surface (1) is preheated before remelting.

16. (Currently Amended) A method according to claim 1 ~~one of the claims 1 to 15~~, wherein said first treatment parameters are selected in such a manner that structures of significance of said to-be-smoothed surface (1) are retained during remelting.